

# SCIENCE DIGEST

JULY TO DECEMBER, 1940, INCLUSIVE

*Articles listed in italics are printed in smaller type and are usually shorter than one page*

## AGRICULTURE AND BOTANY:

- "Ant Trees" of Colombia*.....Nov. 30  
 Better Gardens With Chemicals .....Aug. 27  
*Camera Shows Plant Growth*...Oct. 95  
 Challenge of Soilless Gardening July 8  
*Delicious Fruit Has Evil Odor*..Sept. 14  
*Hardiness of the Fungus*.....Dec. 28  
*High Country Trees Inferior in Lowlands* .....Oct. 69  
*Hypo's Service to Lettuce*.....Nov. 95  
*"Just a Little" Is Often Too Much Plant Hormone*.....Dec. 74  
*"Keep Apples Away" the Florists Now Say*.....Nov. 38  
*Lazy Corn Explained*.....Aug. 55  
*Moldy Lemons Speed Coloration* .....July 96  
*Mysterious Light From Growing plants* .....Nov. 81  
*New Wheat Varieties Resist All Rusts* .....July 48  
*Non-Fattening Potato* .....Aug. 93  
*Oklahoma Botanist Offers Chemical for Experiments*...Aug. 48  
 Our Battle Against Weeds.....Oct. 63  
*Plants Shown to Acquire Immunity to Disease*.....Dec. 22  
*Pruning Pine Trees to Produce Long Boards Free of Knots*..Dec. 57  
*Scientist Reports New Effect of Sunlight on Plants*.....Sept. 80

## ANIMALS:

- Animals that Glow in the Dark. Aug. 81  
*Barnacles Dull But Dependable* Dec. 6  
*Bees Take Life Easy When Food Is Scarce* .....Nov. 31  
 Busy Beaver .....Dec. 75  
*Cats Apparently Have Only One Type of Blood*.....Dec. 55  
 Childhood of Animals.....Dec. 14

- Clothes Moths Squeeze Through Tiny Cracks*.....Sept. 74  
 Curious Ways of the Cat.....Aug. 8  
 "Family" of Flies Inbred for 200 Generations .....Nov. 57  
*Feeding Habits of the Lady Crab* .....Aug. 80  
*Fish Sets Laudable Example for Punctuality* .....July 87  
*Fish Swimbladder Has Many Purposes* .....Nov. 92  
 Friendly Porpoise .....Sept. 63  
*Further Evidence That Swordfish Breed Near Cuba* .....Dec. 55  
*Goldfish Growth Stimulated in "Second Hand" Water* .....Sept. 54  
*Inheritance in Dalmatian Dogs* Sept. 48  
 Insect Aviators .....Sept. 75  
*Is the Blue Jay a Brigand or a Benefactor?* .....Nov. 48  
*Is Ours the Age of Insects?*...Sept. 93  
*Lead Shot Menace to Ducks*...Oct. 51  
*Life Cycle of the Pacific Salmon* .....July 7  
 Life in a Bee Hive.....Oct. 1  
 Life of the Field Mouse.....Nov. 77  
 Man's Gloomy Friend, the Camel .....Nov. 10  
 Mind of the Dog.....July 1  
 Nature's Light Without Heat..July 55  
*Nine-Inch Bird Has Three-Foot Tail* .....Oct. 21  
 Queer Birds .....Oct. 37  
*Rabbits Most Ancient of Living Known Mammals*.....Aug. 14  
*Rats Like Alcohol, But Not Too Much* .....Sept. 34  
*Scientist Offers Experimental Insects* .....Sept. 41  
*Snails Tell of Cuba's Risings and Sinkings* .....Sept. 62  
 Snakes Alive .....July 42

<i>Speed of Hummingbird's Wing-Beat Measured</i> .....	Nov. 29
<i>Stargazer Fish Inflicts Electric Shock</i> .....	Dec. 80
<i>Starlings Show Sex Change in Winter</i> .....	Nov. 76
<i>Strange Animals Collected for National Zoological Park</i> .....	July 70
<i>Strange Fish of the Ocean Depths</i> .....	Dec. 28
<i>Tasmanian Devil Has Perpetual Snarl</i> .....	Sept. 41
<i>Tender Steaks</i> .....	Oct. 96
<i>Triggerfish Has Combination Lock on Its Spines</i> .....	Dec. 92
<i>Unfriendly Dogs Are Born That Way</i> .....	Oct. 36
<i>Unicorn Invented in Late Middle Ages, Expert Says</i> .....	Nov. 37
<i>Unpalatable Man</i> .....	July 38
<i>Wild Geese, Prized in U. S., Are Pests on Far South Isle</i> .....	Oct. 42

#### ANTHROPOLOGY:

<i>Birth Rate Is Highest on Most Crowded Farms</i> .....	Nov. 9
<i>Death Rate in U. S. Still Decreasing</i> .....	Oct. 8
<i>Doctor in the Congo</i> .....	July 15
<i>First Glance at the 1940 Census</i> .....	Nov. 45
<i>Genius on Wise Living May Arise Among Indians</i> .....	July 82
<i>How Africans Meet the Machine Age</i> .....	Aug. 58
<i>Strange Marriage Customs</i> .....	Dec. 83
<i>Violent End Was "Natural" to Early Man</i> .....	Sept. 14

#### ARCHEOLOGY:

<i>Archeologists Find Clue to Old Persian Language</i> .....	July 48
<i>Earliest Paper and Books</i> .....	Nov. 16
<i>Estonians in 940 A.D. Used Artificial Ice</i> .....	July 14
<i>Methods of Stone Age Tanners</i> .....	Nov. 65
<i>Mysterious Village Unearthed in Alaska</i> .....	Dec. 44
<i>Savage Rites of the Aztecs</i> .....	Nov. 32
<i>Sidelights on Archeology</i> .....	Sept. 35
<i>Trojan Horse Parallel in Ancient Egypt</i> .....	Nov. 55

<i>Village of Pre-Christian Era Found in Canada</i> .....	Dec. 74
---	---------

#### ASTRONOMY:

<i>Birth and Death of the Sun</i> ...Nov.	23
<i>Complex Movements of the Earth</i> .....	July 71
<i>Eye for the Astronomer</i> .....	Aug. 77
<i>Measuring the World About Us</i> .....	Aug. 32
<i>Moon May Have Been Part of South America</i> .....	July 64
<i>One Area of Sun Produces Most Spots</i> .....	Dec. 84

#### AUTOMOBILES:

<i>A Psychiatrist Looks at Auto Accidents</i> .....	Dec. 67
<i>Glareless Rearview Mirror</i> .....	Oct. 95
<i>How Driving Habits Influence Tire Wear</i> .....	Aug. 85
<i>How to Avoid Headlight Glare</i> .....	Oct. 23
<i>Infancy of the Automobile</i> .....	Oct. 43
<i>Lowest Accident Rate Found Among Drivers in Forties</i> .....	Dec. 79
<i>Pedestrians Who Drive, Less Often Killed by Automobiles</i> .....	Oct. 21
<i>Radio Controlled Traffic Lights</i> .....	Sept. 94
<i>States Set Legal Standard for Drunken Driver</i> .....	Nov. 55
<i>Technical Advances in '41 Autos</i> .....	Dec. 85

#### AVIATION:

<i>Detects Enemy Aircraft</i> .....	Oct. 96
<i>50,000 Warplanes a Year</i> .....	Oct. 22
<i>Infra-Red Plane Detector</i> .....	Nov. 94
<i>Instrument for Safer Flying</i> .....	Nov. 96
<i>New Air Navigation Aid</i> .....	Sept. 94

#### BIOGRAPHY:

<i>James Watt and the Steam Engine</i> .....	Aug. 86
<i>Prodigious Aristotle</i> .....	July 88
<i>Robert Koch, Pioneer Bacteriologist</i> .....	Sept. 88

#### BIOLOGY:

<i>Bacteria in Ocean Said to Use More Oxygen Than Fish</i> .....	Nov. 66
<i>Biologists Their Own Guinea Pigs</i> .....	July 22
<i>Chromosomes Increased by Chilling of Eggs</i> .....	Nov. 38

<i>Iron in Body Would Make</i>	
<i>One Small Nail</i> .....	Oct. 48
<i>Man Against Microbe</i> .....	Aug. 37
<i>Man-Made Evolution</i> .....	Sept. 86
<i>Man's Smallest Enemy</i> .....	Dec. 7
<i>Molds Secrete Substance</i>	
<i>Deadly to Bacteria</i> .....	Oct. 92
<i>On Freezing Out the Microbes</i> .....	Nov. 53
<i>Oxygen Controls Tissue Mass</i>	
<i>Growth</i> .....	Nov. 89
<i>Sugar Improves Golf</i> .....	Oct. 55
<i>Texas Quadruplets Unique in</i>	
<i>History</i> .....	Nov. 8
<i>Your Body's Chemical Building Blocks</i> .....	Nov. 39

#### CHEMISTRY:

<i>Helium Becoming "Handy Man" of Science</i> .....	Dec. 27
<i>Fireworks—Gunpowder in</i>	
<i>Fancy Dress</i> .....	July 30
<i>Future Aluminum Supply</i> .....	Dec. 95
<i>Last of Elements Is Reported Found</i> .....	Oct. 13
<i>More Reports from American Chemists</i> .....	Dec. 89
<i>New Discoveries in Chemistry</i> .....	Nov. 71
<i>Nornicotine Predominates in Mild Tobaccos</i> .....	Nov. 66
<i>Rubber's Man-Made Rivals</i> .....	Oct. 9
<i>Superheavy Element 94 Discovered</i> .....	Sept. 62
<i>These Potent Chemical Traces</i> .....	Dec. 65

#### EARTH SCIENCE:

<i>Behind the Scenes With the Weather</i> .....	Dec. 29
<i>Da Vinci Expounded Doctrine of Isostasy Centuries Ago</i> .....	Oct. 88
<i>Death Valley, Calif., Hottest Place on Earth</i> .....	Oct. 28
<i>Earthquake Analyzer</i> .....	Aug. 94
<i>Feats of Lightning Calculators</i> .....	Nov. 83
<i>Hide-and-Seek Islands</i> .....	Aug. 14
<i>How the Ocean Affects Climate</i> .....	Aug. 71
<i>Ice Age Glaciers Were Perhaps Thicker Than Supposed</i> .....	Nov. 53
<i>"It's the Humidity"</i> .....	Oct. 89
<i>Mysteries of Lightning</i> .....	Oct. 14
<i>New Theory Explains Former Ice Age Near Equator</i> .....	Oct. 75
<i>Predict Radio "Weather" Three Months in Advance</i> .....	July 29

<i>Robot Weather Observers</i> .....	Sept. 95
<i>Volcanoes in the Making</i> .....	July 35
<i>Weather or Not</i> .....	Oct. 52

#### ELECTRICITY AND ENGINEERING:

<i>Air Conditioning and Clothing</i> .....	Dec. 5
<i>Electric Pup at New York Fair</i> .....	July 95
<i>Electrically Heated Diving Suit</i> .....	Dec. 93
<i>Fluorescent Carpet</i> .....	Oct. 95
<i>Radiant Heat for Your Home</i> .....	Dec. 1
<i>Synthetic Conductors</i> .....	Nov. 94

#### INDUSTRY:

<i>Candy from Whey</i> .....	July 96
<i>Home Life of Plastics</i> .....	Oct. 24
<i>Moth-Proof Wool</i> .....	Aug. 95
<i>New Paints Reflect Ultraviolet Light</i> .....	July 41
<i>New Printing Method</i> .....	Oct. 93
<i>Nylon "Wool" Next</i> .....	July 96
<i>Petroleum in Peace and War</i> .....	Aug. 65
<i>Practical Uses of Invisible Glass</i> .....	July 61
<i>Retarding Friction with Finishes</i> .....	July 39
<i>"Strongest Yarn"</i> .....	Dec. 96
<i>Sulfur in Industry</i> .....	Dec. 70

#### MEDICINE:

<i>Anoxia</i> .....	Sept. 96
<i>Chronic Disease—The Unseen Plague</i> .....	Sept. 69
<i>Colored Photographs of Inside of Body</i> .....	Aug. 57
<i>Conquering the Scourge of Smallpox</i> .....	July 65
<i>Hidden Dangers in the Air</i> .....	Dec. 58
<i>Improving America's Diet</i> .....	Aug. 21
<i>Infant Mothers</i> .....	Sept. 9
<i>Man's Appetite Found Defective</i> .....	Aug. 92
<i>New High Speed X-ray</i> .....	Aug. 93
<i>Problem of Drug Addiction</i> .....	Oct. 70
<i>62 Years Is Average Expectancy of Life</i> .....	Aug. 80
<i>Stature of Man Decreasing</i> .....	Sept. 61
<i>Sulfanilamide, Master Germ Killer</i> .....	Sept. 42
<i>What's New in Medicine</i> .....	
.....	July 49, Aug. 49, Sept. 49, Oct. 49, Nov. 49, Dec. 49
<i>When Liver and Onions Are Poisonous</i> .....	Nov. 92

At 5/2-42

## PATENTS, PROCESSES, INVENTIONS:

<i>Brilliant Metal Surfaces</i> .....	Oct. 93
<i>Cause of Dirt Patterns on Walls</i> .....	July 94
<i>For Measuring Sunburn Rays</i> .....	Sept. 95
<i>Manuscript Manipulator</i> .....	Nov. 96
<i>More Transparent Lenses</i> .....	Dec. 94
<i>New Device for Sound Effects</i> .....	Aug. 96
<i>New Projector</i> .....	Dec. 96
<i>Nitrogen Rejuvenates Cable</i> .....	Nov. 95
<i>Rejuvenated Phonograph Records</i> .....	Dec. 93
<i>Smoke Eliminated by Sound</i> .....	Dec. 94

## PHYSICS:

<i>Ancestors of the Thermometer</i> .....	Nov. 67
<i>Anatomy of the Atom</i> .....	Oct. 81
<i>Peculiarities of Freezing Water</i> .....	Oct. 80
<i>New Uses for Infrared Photography</i> .....	Sept. 81
<i>Possible Fabulous Power from Uranium</i> .....	July 83
<i>Swede Finds Way to Speed Concentration of Uranium</i> .....	July 87

## PSYCHOLOGY:

<i>American Psychologists Report</i> .....	Nov. 62
<i>As We Grow Old</i> .....	Dec. 23
<i>"Best" Cigarette Is the One You Like</i> .....	July 21
<i>Brain Waves and Intelligence</i> .....	Nov. 15
<i>Can We Trust Intelligence Tests?</i> .....	Aug. 15
<i>Detection of Malingering</i> .....	Dec. 81
<i>Expressing Emotions the World Over</i> .....	Oct. 56
<i>How Large Families Make Ends Meet Probed</i> .....	July 41
<i>Identical Twins Respond in an Identical Manner</i> .....	Nov. 76
<i>More Suicides Nowadays, Census Figures Show</i> .....	Nov. 54
<i>Our Changing Human Nature</i> .....	Sept. 22
<i>Teach Students to Read, Educators Urge</i> .....	Nov. 30

<i>This Superstitious World</i> .....	Sept. 55
<i>Tricks of the Beggars</i> .....	Dec. 3
<i>Truth About Hypnotism</i> .....	Nov. 1
<i>Twins More Alike Physically Than Mentally</i> .....	July 4
<i>Urges Study of How Stormy Weather Wrecks Tempers</i> .....	Nov. 7
<i>Why Men Succeed</i> .....	Sept. 1

## QUIZZES:

<i>Science Digest Quiz</i> .....	Nov. 56, Dec. 56
<i>Test Your G. S. Q.</i> .....	Aug. 56

## RADIO AND TELEVISION:

<i>Color Television</i> .....	Nov. 93
<i>Crystals That Control Radio Wave Lengths</i> .....	Nov. 90
<i>Inexpensive Iconoscope</i> .....	Aug. 94
<i>Inside the Television Set</i> .....	Sept. 1
<i>Large-Screen Television</i> .....	Aug. 9
<i>Programs for Television</i> .....	Nov. 1
<i>Radio from Overseas</i> .....	Oct. 77
<i>Stage Set for Frequency Modulation Radio</i> .....	Aug. 7
<i>Television in Natural Color</i> .....	Sept. 96

## WAR SCIENCE:

<i>America's Wartime Chemicals</i> .....	Sept. 29
<i>Blitzkrieg!</i> .....	Sept. 10
<i>Fright Long a Factor in War</i> .....	Nov. 54
<i>Instruments That Help Win Wars</i> .....	Oct. 29
<i>New Bomb Release for Planes</i> .....	Nov. 96
<i>Strategic Mg and Mn</i> .....	Sept. 94
<i>Truth About Death Rays</i> .....	Aug. 44
<i>War and Population</i> .....	Sept. 47

## MISCELLANEOUS:

<i>Expanding Frontiers of Science</i> .....	Aug. 1
<i>Highlights in Recent Science</i> .....	July 76
<i>Human Side of Numbers</i> .....	Dec. 45
<i>Odd Numbers</i> .....	Nov. 58
<i>"Real" Names Urged for European Maps</i> .....	July 60
<i>War Prevents Celebration of Copernicus Anniversary</i> .....	Oct. 62
<i>War Causes Decline in Research</i> .....	Nov. 22

5  
7  
7  
1  
6  
6  
9  
0  
4  
3  
1  
7  
7  
6  
9  
0  
4  
9  
6  
4  
4  
7  
1  
6  
5  
8  
0  
2  
2